

**REMARKS**

**Upon receipt of this response, the Examiner is respectfully requested to contact the undersigned representative of the Applicant to arrange a telephone interview concerning the inventive merits of this application.**

This response accompanies a Request for Continued Examination. Please consider this response upon reconsideration of the above identified application.

Claim 44 is objected to for the reasons noted in the official action. The above requested claim amendment is believed to overcome all of the raised informalities concerning the claim. If any further amendment to the claim 44 is believed necessary, the Examiner is invited to contact the undersigned representative of the Applicant to discuss the same.

Next, claims 1, 7-11 and 18-19 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Payton '555 (U. S. Patent No. 4,660,555) in view of Simmons et al. '511 (U.S. Patent No. 5,752,511), claims 3-6 and 13-16 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Payton '555 (U. S. Patent No. 4,660,555) and Simmons et al. '511 (U.S. Patent No. 5,752,511), as applied to claim 1, and further in view of Kahn et al. '807 (U.S. Patent No. 5,105,807), while claims 17 and 44 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Payton '555 (U. S. Patent No. 4,660,555) and Simmons et al. '511 (U.S. Patent No. 5,752,511), and further in view of Zimmerman et al. '124 (U.S. Patent No. 4,273,124). The Applicant acknowledges and respectfully traverses all of the raised obviousness rejections in view of the above amendments and the following remarks.

Before discussing the applied prior art in detail, the Applicant would first like to summarize the inventive aspects of the presently claimed invention. As presently recited in amended claim 1, the present invention relates to and covers a nasal cannula for supplying a respiratory gas to a patient. The nasal cannula comprises *a pair of supply lines which each have a head adjacent a leading end thereof with a discharge opening therein for discharging a respiratory gas*, and an opposite end of each of the pair of supply lines being connectable to a respiratory gas source. Each head is formed integrally with and from the same material as the pair of supply line and *each head comprises a generally cylindrical surface which is sized to be snugly received and retained within one of the nasal cavities of the patient*. An exterior

surface of each head has a plurality elongate troughs formed therein, and *each of the plurality of elongate troughs extends parallel to one another and is formed in the generally cylindrical surface of the head*. The plurality elongate troughs form, once insert into the respective nasal cavity, a plurality of leakage passages, between a portion of inwardly facing nasal cavity skin of the patient and the plurality elongate troughs of the head, to facilitate exhausting of excess respiratory gas supplied to the patient through the leakage passage while maintaining a positive pressure within a respiratory passage of the patient at least during exhalation by the patient. Lastly, the *pair of supply lines are connected with one another by a central bridge member* which has an axial length that spans no more than a width of a philtrum of the patient.

Turning now to the applied base reference of Payton '555, this reference teaches an oxygen delivery and administration system using a single conical nosepiece and a tube holder, not a pair of supply lines which are connected together by a central bridge, as presently claimed. Payton '555 discloses a plurality of elongate troughs 45 formed in the exterior surface of the conical nosepiece—see Fig. 10—but such elongate troughs extend to the terminal end of the cannula tubing, and each trough is positioned at an angle to the axis defined by a center of the terminal region of the cannula tubing. The elongate troughs are not formed in a cylindrical surface of the head and do not extend parallel to one another, as presently claimed.

In distinct contrast, according to the presently claimed invention, each head comprises a generally cylindrical surface which is sized to be snugly received and retained within one of the nasal cavities of the patient. Further, each trough extends parallel to one another and is formed in the generally cylindrical surface of the head. Lastly, the pair of supply lines are connected with one another by a central bridge member. Payton '555 fails to in any way teach, suggest, disclose or remotely hint at either a pair of supply lines or a central bridge interconnecting the pair of supply lines with one another.

In order to emphasize the above noted distinctions between the presently claimed invention and the applied art, the independent claims of this application now recite the features of "...a pair of supply lines which each have a head adjacent a leading end thereof with a discharge opening therein for discharging a respiratory gas...each head comprises a generally cylindrical surface which is sized to be snugly received and retained within one of the nasal

cavities of the patient, an exterior surface of each head has a plurality elongate troughs formed therein, and each of the plurality of elongate troughs extends parallel to one another and is formed in the generally cylindrical surface of the head...and the pair of supply lines being connected with one another by a central bridge member having an axial length that spans no more than a width of a philtrum of the patient..." Claims 7 and 10 recited additional features of the bridge which further distinguish the presently claimed invention from the applied art. Such features are believed to clearly and patentably distinguish the presently claimed invention from all of the art of record, including the applied art.

The Applicant acknowledges that the additional references of Simmons et al. '511, Kahn et al. '807 and Zimmerman et al. '124 may arguably relate to the features indicated by the Examiner in the official action. Nevertheless, the Applicant respectfully submits that the combination of the base reference of Payton '555 with this additional art of Simmons et al. '511, Kahn et al. '807 and Zimmerman et al. '124 still fails to in any way teach, suggest, disclose or remotely hint at the above distinguishing features of the presently claimed invention. As such, all of the raised rejections should be withdrawn at this time in view of the above amendments and remarks.

In the event that any further amendment to any of the claims of this application is believed or deemed necessary, then the Examiner is invited to contact the undersigned representative of the Applicant in order to discuss further amendment of the above identified application.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejection(s) should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the Payton '555, Simmons et al. '511, Kahn et al. '807 and Zimmerman et al. '124 references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the

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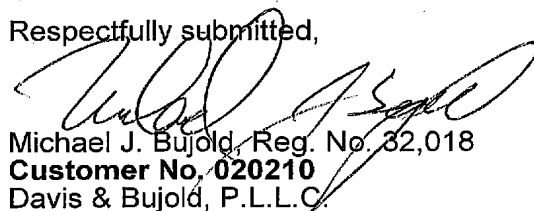
Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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